



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1114; Directorate Identifier 2012-NE-21-AD]

RIN 2120-AA64

Airworthiness Directives; CFM International, S. A. Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain CFM International, S. A. (CFM) model CFM56-5 and CFM56-5B series turbofan engines. This proposed AD was prompted by corrosion of the delta P valve in the hydromechanical unit (HMU) caused by contaminants in type TS-1 fuel. This proposed AD would require cleaning, inspection and repair of affected HMUs. We are proposing this AD to prevent seizure of the HMU, leading to failure of one or more engines and damage to the airplane.

DATES: We must receive comments on this proposed AD by [insert date 60 days after date of publication in the FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.

- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact CFM International Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; International phone: 1-513-552-3272; USA phone: 877-432-3272; International fax: 1-513-552-3329; USA fax: 877-432-3329; email: geae.aoc@ge.com; or CFM International SA, Customer Support Center, International phone: 33 1 64 14 88 66; fax: 33 1 64 79 85 55; email: snecma.csc@snecma.fr. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (phone: 800-647-5527) is the same as the Mail address provided in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Martin Adler, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7157; fax: 781-238-7199; e-mail: martin.adler@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-1114; Directorate Identifier 2012-NE-21-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD.

Discussion

We have received reports over the past 18 months of CFM model CFM56-5 and CFM56-5B series turbofan engines, when operated on type TS-1 fuel, that have experienced an in-flight shutdown resulting from HMU failures. Investigation has determined that these HMU failures were caused by corrosion and seizure of the HMU delta P valve. Fuel samples from event airplanes also contained contaminants and

corrosive catalysts. This condition, if not corrected, could result in seizure of the HMU, leading to failure of one or more engines and damage to the airplane.

Relevant Service Information

We reviewed CFM Service Bulletin (SB) CFM56-5 S/B 73-0182, Revision 7, dated September 25, 2012, and CFM SB CFM56-5B S/B 73-0122, Revision 9, dated September 25, 2012. The service information describes procedures for cleaning, inspection, and repair of the affected HMUs.

FAA's Determination

We are issuing this proposed AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist in other products of the same type design.

Proposed AD Requirements

This proposed AD would require removing, cleaning, inspection, and repair of the affected HMUs.

Costs of Compliance

Based on the service information, we estimate that this proposed AD would not affect any products of U.S. registry. We also estimate that it would take about 4 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the proposed AD to have no cost impact to U.S. operators.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

CFM International S.A.: Docket No. FAA-2012-1114; Directorate Identifier 2012-NE-21-AD.

(a) Comments Due Date

We must receive comments by [insert date 60 days after date of publication in the FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to CFM International S.A. (CFM) CFM56-5 and CFM56-5B series turbofan engines with any of the hydromechanical unit (HMU) fuel control part numbers (P/Ns) in paragraphs (c)(1) and (c)(2) of this AD, installed:

(1) CFM56-5: CFM P/Ns 1348M79P02; 1348M79P03; 1348M79P04; 1348M79P06; 1348M79P07; 1348M79P08; 1348M79P09; 1348M79P10; 1348M79P11; 1348M79P12; 1348M79P13; and 1348M79P14.

(2) CFM56-5B: CFM P/Ns: 1348M79P08; 1348M79P09; 1348M79P10; 1348M79P11; 1348M79P12; 1348M79P13; and 1348M79P14.

(d) Unsafe Condition

This AD was prompted by corrosion of the delta P valve in the HMU fuel control caused by exposure to type TS-1 fuel. We are issuing this AD to prevent seizure of the HMU, leading to failure of one or more engines and damage to the airplane.

(e) Compliance

Unless already done, do the following:

(f) Record Type TS-1 Fuel Usage

(1) From the effective date of this AD, record all TS-1 fuel usage.

(2) If the HMU never uses TS-1 fuel, no further action is required.

(g) Initial Inspection

If the HMU has operated on TS-1 fuel, inspect the HMU for corrosion as follows:

(1) For an HMU that has operated for less than 8,000 hours since new (HSN) or hours since last overhaul, inspect the HMU before 10,000 HSN or hours since last overhaul, whichever comes later.

(2) For an HMU that has operated for 8,000 or more HSN or hours since last overhaul, inspect the HMU within 24 months or 2,000 hours after the effective date of this AD, whichever comes first.

(3) Use paragraph 3.A(2) of CFM Service Bulletin (SB) CFM56-5 S/B 73-0182, Revision 7, dated September 25, 2012, or CFM SB CFM56-5B S/B 73-0122, Revision 9, dated September 25, 2012, to do the inspection.

(h) Repetitive Inspections

Repeat the inspection required in paragraph (g)(3) of this AD before 10,000 hours since last overhaul if after last overhaul the HMU is exposed to TS-1 fuel.

(i) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(k) Related Information

(1) For more information about this AD, contact Martin Adler, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7157; fax: 781-238-7199; e-mail: martin.adler@faa.gov.

(2) Refer to EASA Airworthiness Directive No. 2012-0123, dated July 9, 2012, and CFM SBs CFM56-5 S/B 73-0182, Revision 7, dated September 25, 2012, and CFM56-5B S/B 73-0122, Revision 9, dated September 25, 2012, for related information.

(3) For service information identified in this AD, contact CFM International Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; International phone: 1-513-552-3272; USA phone: 877-432-3272; International fax: 1-513-552-3329; USA fax: 877-432-3329; email: geae.aoc@ge.com; or CFM International SA, Customer Support Center, International phone: 33 1 64 14 88 66; fax: 33 1 64 79 85 55; email: snecma.csc@snecma.fr.

(4) You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on January 4, 2013.

Robert J. Ganley,
Acting Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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